



4-20mA to DALI Converter

**Mains supplied
with DALI PS 30mA**



Datasheet

Interface

Interface for converting
4-20mA signals to DALI dim levels
mains supplied
integrated DALI-bus power supply

Art. Nr. 86468334-230-HS

4-20mA to DALI Converter 30mA - Interface

Overview

- Compact interface module for the conversion of 4-20mA control signals to DALI dim levels
- The interface module provides a 30mA DALI power supply for up to 10 standard DALI ballasts (30mA), up to 64 ballasts can be controlled with the help of a [DALI-2 Expander](#)
- The 4-20mA current value is sent Broadcast as a dimming value on the DALI bus
- A change in the 4-20mA input signal (>1%) is used as a trigger event
- The interface module is supplied with mains voltage (230V).
- Easy selection of the dim characteristic with the help of jumpers
- A 4-20mA line break is recognized and output accordingly on the DALI side.
- **4-20mA input and DALI bus are galvanically isolated from each other as well as from the mains.**



Specification, Characteristics

type	4-20mA / DALI Converter
article number	86468334-230-HS
input: 4-20mA	
input type	4-20mA, load 100hm
terminals	4-20mA, COM, M3, M2, M1
functionality	signal converter selection of dim characteristic with jumper, see page 4
input: L, N	
input type	Mains galvanically isolated from DALI and 4-20mA input
terminals	L, N
input voltage range	110Vac ... 230Vac
max. input current	40mA (@120Vac), 20mA (@240Vac)
input supply frequency	50Hz / 60Hz
max. power consumption	4 Watt
output: DA+, DA-	
output type	DALI
terminals	DA+, DA-
output voltage range	12Vdc ... 20,5 Vdc
guaranteed DALI supply current	I _{max} 30mA
Max. DALI output current	I _{max} 30mA
Open circuit proof	yes
short circuit proof	yes

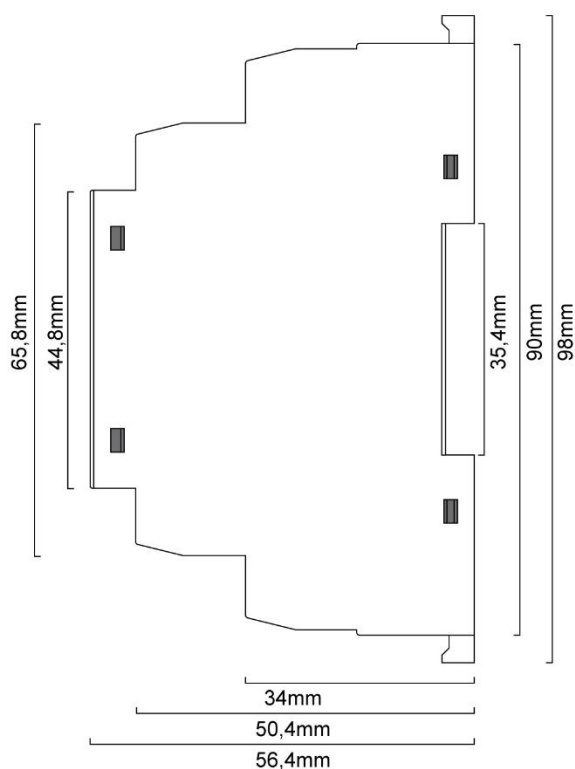
Galvanic isolation	DALI galvanically isolated from 4-20mA input and mains
Typ. current consumption	4mA + current for DALI output

environmental conditions:

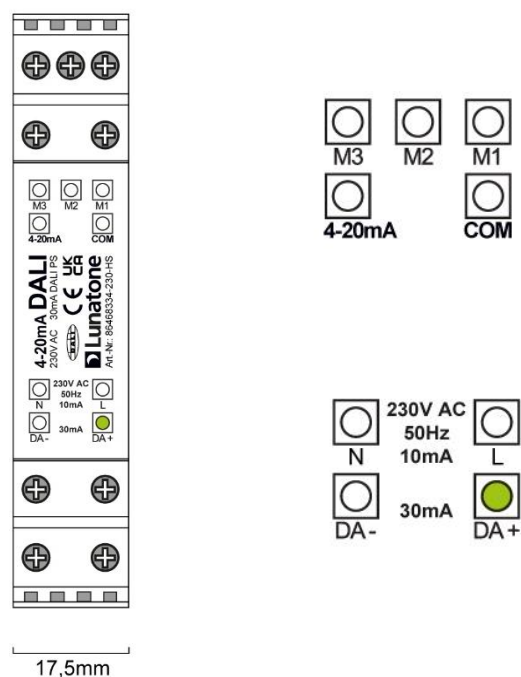
storing and transportation temperature	-20°C ... 75°C
operating ambient temperature	-20°C ... 60°C
rel. humidity, none condensing	15% ... 90%

mechanical data:

mounting	DIN rail
dimensions (L x W x H)	98mm x 18mm x 56 mm
protection class	II in intended use
protection degree housing	IP40
protection degree terminals	IP20
diameter connection wire	0.5-2.5 mm ²
connection type	screw terminal
release of wire	open screw

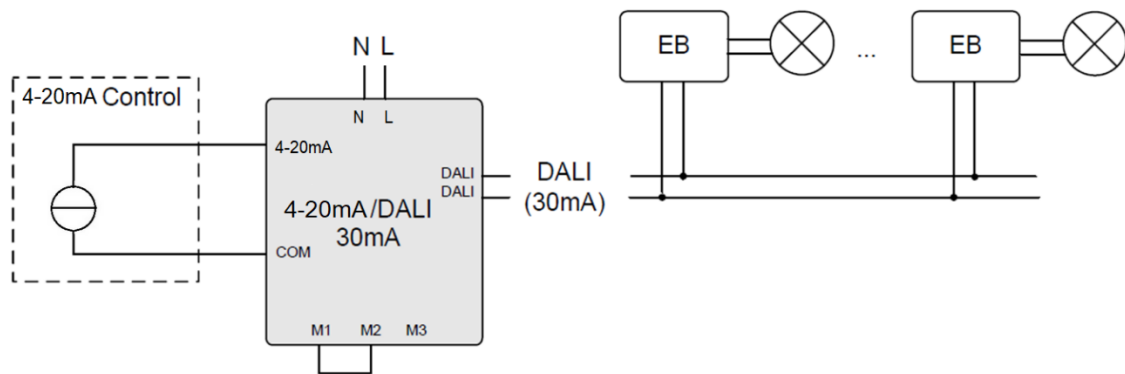


geometry



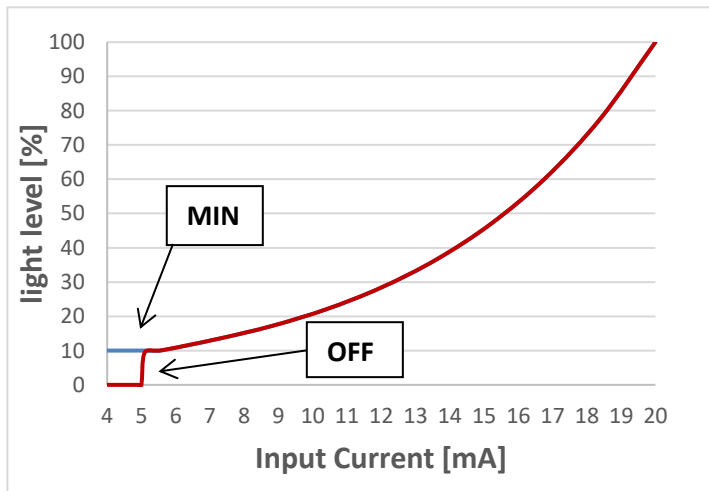
connection plan

Typical Application



typical Application: Dali control with 4-20mA input

4-20mA / DALI Conversion



The light level corresponds to the output power of a standard DALI ballast (according to IEC62386-102) connected to the converter.

Conversion Curve:

The input range of 4-20mA is converted to the light level range of the connected DALI ballast

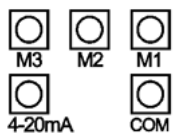
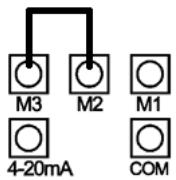
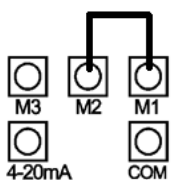
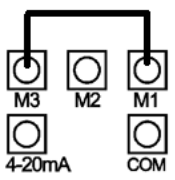
Depending on the configuration, it is mapped to 1% -100% or 10% -100% of the output power.

For the sake of clarity, only the characteristic curves with 10% light level are shown.

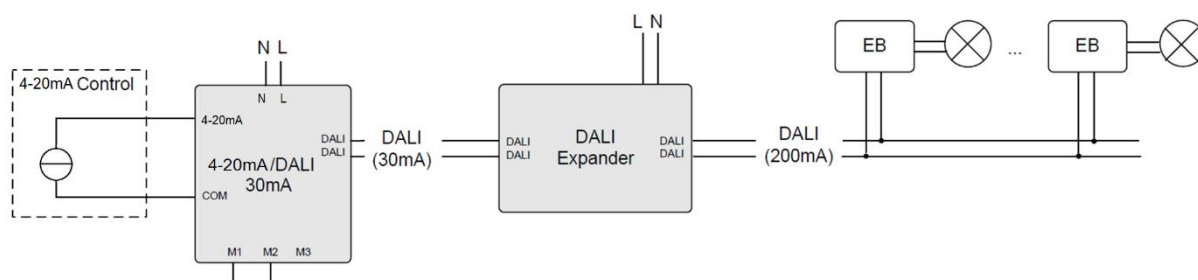
MIN/OFF:

The behaviour below 5mA can be selected: either the device switches off (OFF - red) or it sends the minimum level (MIN - blue).

Selection of dim characteristics by placing jumpers at M1 ... M3

 V1: Dimming: 1%-100% below 5mA: OFF (similar to red characteristic but light level: 1% at 5mA)	 V2: Dimming: 10%-100% below 5mA: OFF (red characteristic)	 V3: Dimming: 1%-100% below 5mA: MIN (1%) (similar to blue characteristic but light level: 1% at 5mA)	 V4: Dimming: 10%-100% below 5mA: MIN (10%) (blue characteristic)
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Application Example: Controlling up to 64 ballasts with a DALI-Expander



Control of 64 DALI-luminaires with a 4-20mA to DALI converter and a [DALI-2 Expander \(art. nr.: 89452937\)](https://www.lunatone.com/en/product/dali-2-expander/)

Purchase Information

Art.Nr. 86468334-230 -HS: 4-20mA to DALI Converter, mains supplied, integrated 30mA bus power supply, configurable conversion characteristic, DIN rail

Accessories:

Art.Nr.: 89452937, DALI-2 Expander: DALI-input 1 address to DALI Broadcast output, DALI PS 200mA out, Sw&Dim input
<https://www.lunatone.com/en/product/dali-2-expander/>

Additional Information and Equipment

DALI-Cockpit – DALI system configuration tool, free when using a Lunatone interface device
<https://www.lunatone.com/en/product/dali-cockpit/>

Lunatone DALI-products
<https://www.lunatone.com/en/>

Lunatone datasheets and manuals
<https://www.lunatone.com/en/downloads-a-z/>

Contact

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Requests: sales@lunatone.com

www.lunatone.com



Disclaimer

Subject to change. Information provided without guarantee. The datasheet refers to the current delivery.

The compatibility with other devices must be tested in advance to the installation.